

SOV/109-4-8-26/35

The Back Scattering and the Secondary Emission During the Irradiation of Various Materials by β -electrons

with a uniform layer of a preparation of Sr^{90} and Y^{90} having an overall activity of 210 m-Curie. The activity was determined by means of an end-view counter by employing the method of Keirim-Markus and L'vova (Ref 1).

The total radiation current was $I = 9.86 \times 10^{-10} \text{ A}$. The current I_B of the back scattering and the secondary emission can be determined from:

$$i = I - I_B \quad (1)$$

where i is the current between the radiation source and the collector. The overall coefficient of the secondary emission and the back scattering is defined by:

$$\sigma = \frac{I_B}{I} 100\% \quad (2)$$

The current i can be determined from:

Card2/4

$$i \approx UC/t \quad (3) \quad \checkmark$$

SOV/109-4-8-26/35

The Back Scattering and the Secondary Emission During the
Irradiation of Various Materials by β -electrons

where U is the voltage developed across the capacitor and the electrostatic voltmeter in Figure 1. The measurements were made at $U = 100$ V, the circuit time constant being of the order of 10^3 to 10^4 sec. The time necessary for the capacitor to reach 100 V was less than 25 sec; the error was therefore due primarily to the error in the measurement of time. The source was switched on by opening the key K (see Figure 1). During the intervals between the measurements, the collector and the radiation source were shorted, the interval being equal to 3 min. If the closing interval were shorter, the excess charges did not have time to leak away and the measurements were burdened with an error; this can be seen in Figure 2, which shows the dependence of the voltage across the capacitance on the switching-on time for various closing times. The measurements were carried out at a pressure of 10^{-4} mm Hg. ✓

Card 3/4

SOV/109-4-8-26/35

The Back Scattering and the Secondary Emission During the
Irradiation of Various Materials by β -electrons

The results of the measurements can be briefly stated as follows. It was found that, over the pressure range from 2×10^{-3} to 5×10^{-7} mm Hg, the current i is substantially constant; this is seen in Figure 3. The dependence of the overall back scattering and secondary emission on the atomic number of a substance is illustrated in Figure 4; Curves 1 and 2 were obtained by the author by employing an end-view counter and the equipment shown in Figure 1; Curves 3 and 4 were taken from the work of Miller and Porter (Ref 5). From the figure, it is seen that the measurement by the direct method gives the values which are about 40% lower than those obtained by means of the counter. The author expresses his gratitude to Professor P.V. Timofeyev, who directed this work and to Ye.G. Kormakova for preparing the emitter of the secondary electrons. There are 5 figures and 8 references, of which 2 are Soviet and 6 English.

SUBMITTED: May 16, 1958
Card 4/4

21(1), 21(4)

SOV/89-6-4-12/27

AUTHORS: Timofeyev, P. V., Simchenko, Yu. A.

TITLE: Atomic Source of High Voltage (Atomnyy istochnik vysokogo napryazheniya)

PERIODICAL: Atomnaya energiya, 1959, Vol 6, Nr 4, pp 470-472 (USSR)

ABSTRACT: An atomic source is described which may be used in portable devices for the feeding of various tube circuits. Two glass cylinders are coaxially melted into a glass balloon, which are connected with each other by a metal ring. On the internal cylinder, the collector of the β -partilces is, on the one hand, fastened by means of an annular spring, and may, on the other hand, be centered by means of a mica ring. The collector consists of an external nickel- and an internal aluminum cylinder. Owing to this construction, the back scattering of the collector amounts to $\sim 14\%$ of the entire β -particle current impinging upon it. A nickel tube of only a few μ thickness is arranged coaxially to the collector; in its interior the preparation is uniformly applied. Current lead-out wires (positive: platinum wire-glass sealing, negative (collector): direct wire metal ring) end in normal cable caps such as are usual in counters. As a β -source Sr^{90} - Y^{90} with a

Card 1/2

SOV/89-6-4-12/27

Atomic Source of High Voltage

total activity of ~ 343 mC is used. At a resistance of $1.6 \cdot 10^{13}$ ohm (resistance of the source and of the electrostatic voltmeter S-96) the device furnishes a voltage of up to 24 kv. The time constant is $\sim 6 \cdot 10^2$ sec. The utilization coefficient of β -radiation is $\sim 76\%$. 14% are lost by back scattering. The remaining 10% of losses are due to absorption, slowing-down of electrons in the field emitter-collector, and to the fact that the solid angle concerned is smaller than 4π . The voltage-resistant characteristic of the atomic voltage source is given. By means of this source low capacities or high resistances (10^{11} to $1.5 \cdot 10^{13}$ ohm) may be measured in certain wiring circuits. The life-time of the source is limited only by the half-life of the β -radiator. The properties of the source do not vary in the case of temperature fluctuations of from $+50$ to -50°C . Short circuits are not dangerous to the source. This atomic voltage source may be connected both parallel and in series. In radiocircuits it causes no noise. There are 3 figures and 12 references, 1 of which is Soviet.

SUBMITTED: May 31, 1958

Card 2/2

9.3120 (1103, 1137, 1140)

S/109/60/005/008/001/024

9.4140

26.1640

E140/E555

AUTHORS: Timofeyev, P. V. and Simchenko, Yu A

TITLE: β -Electron Emission in Vacuum and its Applications

PERIODICAL: Radiotekhnika i elektronika, 1960, Vol 5, No.8,
pp 1197-1202

TEXT: The authors state that in electronics the applications of radioisotopes are limited to the experimental use of β and α -radiation for power supplies. At the end of the paper certain speculations are presented on the use of radioisotopes in cathodes. Popov's use of β -radiation to charge an electroscope in 1901 is claimed as the first practical utilization of charge transfer by nuclear particles. Mosely's 150 kV source of 1913 is also cited. The use of semiconductor or thermoelectric devices to convert β -radiation energy to electrical energy cannot find wide application because lattice defects form in the crystals and destroy their properties. The applications holding most promise are those in which differences of potential arise through the transfer in vacuum of β -particles and thus of electric charge from one electrode of a capacitor to another. The article presents a review

Card 1/4

S/109/60/005/008/001/024
2140/F553

β -Electron Emission in Vacuum and its Applications

of devices furnishing 10^{-9} to 10^{-8} A at 20 to 40 kV, as previously described in Ref.3. Among the known radioisotopes, the most suitable sources of β -radiation are Pm^{147} and $\text{Sr}^{90} - \text{Y}^{90}$. As the latter give rise to hard X-rays in a nuclear generator, they necessitate large and heavy metal shields and are therefore inconvenient as miniature power supplies. Pm^{147} has a maximum β -electron energy of 0.222 MeV and a mean β -spectral energy of about 75 keV, with a half-life of 2.3-2.7 years. The salt used for β -electron emitters can be outgassed at high temperatures in vacuum. The X-radiation is negligible. The gas evolution during operation is also much more favourable for Pm^{147} . A sectional drawing of a typical supply device is shown in Fig 2, where 1 is the β -electron source consisting of a nickel cylinder having a thin film of radioisotopes on its inner surface. It is supported by glass 4 sealed to a copper cylinder 2. The collector 3 is of aluminium and is mounted inside the copper cylinder. The assembly is in a metal housing 5 whose walls are of sufficient thickness to suppress the X-radiation. The high-voltage lead 6 is

Card 2/4

S/109/60/005/008/001/024
E140/E555

β -Electron Emission in Vacuum and its Applications

insulated from the body. A typical curve of output voltage against load resistance is shown in Fig.4. Due to the exceedingly high stability of such sources, they may be used with such apparatus as image converters, photo-conductive television camera tubes, permitting operation at maximum ratings and efficiency. The emission of β -electrons can be utilized to establish a positively-charged surface. This could be employed with, for example, magnesium-oxide cathodes which give stable emission of up to 10 mA under the effects of positive surface charge, as described in earlier work (Ref.6). There are 6 figures and 7 references: 5 Soviet and 2 non-Soviet.

ASSOCIATION: Vsesoyuznyy elektrotekhnicheskiy institut imeni V. I. Lenina (All-Union Electrotechnical Institute imeni V. I. Lenin)

SUBMITTED: December 21, 1959

Card 3/4

S/109/60/005/008/001/024
E140/E555

β -Electron Emission in Vacuum and its Applications

Fig.2

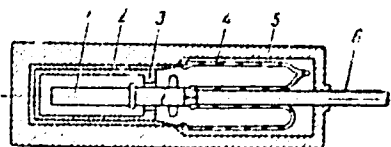
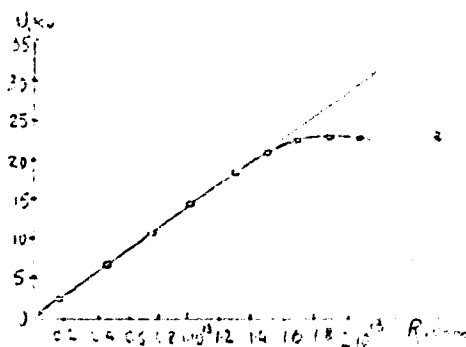


Рис. 2. Схема ядерного источника
высокого напряжения:

1 — эмиттер β -электронов; 2 — медный
цилиндр; 3 — катод; 4 — стальной
цилиндр с окном; 5 — металлический кор-
пус; 6 — вывод положительного электрода

Fig.4



Card 4/4

SIMCHENKO, Yuriy Borisovich

[Devices of the Siberian peoples of the 17th century]
Tamgi narodov Sibiri XVII veka. Moskva, Nauka, 1965.
225 p. (MIRA 16:8)

111111111, 11.11.

"Osnovnye cherty kul'tury okhotnikov na likogo olena severnoy Evrazii."

report submitted for 7th Intl Cong, Anthropological & Ethnological Sciences,
Moscow, 3-16 Aug 64.

, 1.

... .. 10.
... .. 5,

... .. 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100.

SIMDYANKIN, A. P., slesar' po remontu gidromekhanicheskikh reduktorov

Repair of a hydromechanical reducer. Elek. i topl. tiaga 6
no.9:19 S '62. (MIRA 15:10)

1. Depo Arys' Kazakhskoy dorogi.

(Diesel locomotives—Repairing)

SIMDYANKIN, I.I.; ZEFIROVA, L.G.; MOROZOVA, V.M.

~~More sugar~~ to the sulfite-alcohol plants. Gidroliz. i
lesokhim. prom. 10 no.2:19-20 '57.

(MLRA 10:5)

1. Balakhninskiy tsellyulozno-bumazhnyy kombinat.
(Sulfite liquor) (Alcohol)

SIMDYANKIN, I.I.

Measures to reduce the gas content of the air in woodpulp
plants. Bum.prom. 34 no.10:22 0 '59. (MIRA 13:2)

1. Nachal'nik tsellyuloznogo zavoda Balakhninskogo tsellyulozno-
bumazhnogo kombinata.
(Balakhna--Woodpulp industry--Safety measures)

SIMDYANKIN, I.I.; SANNIKOV, V.A.

Setup for the interception of pulp and liquid blown out of
the digester. Bum.prom. 35 no.1:21-22 Ja '60.

(MIHA 13:6)

1. Nachal'nik tsellyuloznogo zavoda Balakhninskogo kombinata
(for Simdyankin). 2. Nachal'nik Teplovoy-elektricheskoy
stantsii Balakhninskogo kombinata (for Sannikov).
- (Balakhna--Woodpulp industry--Equipment and supplies)

SIMDYANKIN, I. I.

Purification of hard unbleached pulp. Bum.prom. 35 no.10:18-19
0 '60. (MIRA 13:10)

1. Nachal'nik tsellyuloznogo zavoda Balakhninskogo kombinata.
(Balakhna--Woodpulp)

SIMDYANKIN, I.I.

How we surmounted the difficulties in the introduction of the machine No.2. Bum.prom. 37 no.8:10-11 Ag '62. (MIRA 17:2)

1. Glavnyy tekhnolog Balakhninskogo kombinata.

SIMECHK, Cyril Dr

Simultaneous bronchspirometry with a double sound. Rozhl.chir. 34
no.9:533-535 Nov 55.

1. Z tbc oddeleni KUNZ v Olomouci, prednosta prim. Dr Vl.Riha
(RESPIRATION, function tests,
bronchspirometry with double sound (Cs))
(BRONCHOSCOPY,
bronchspirometry with double sound (Cs))

2053. TRANSBRONCHIAL AND TRANSTRACHEAL DIAGNOSTIC PUNCTURES -

Perbronchiální a peritracheální diagnostické punkce - Šimeček C. Přem. Obšl. Střed. Fak. Nemocnice, Olomouc - ACTA UNIV. PALACK. OLOMUC. ENSIS 1956, 11 (199-204) Graphs 1 Tables 3 Figs. 1

Transtracheal and transbronchial punctures represent a widening of the diagnostic means. The following are concerned: puncture of the large vessels and the left atrium, puncture of the gap between trachea and oesophagus and finally puncture of pathological masses situated in the peritracheal and peribronchial regions. Puncture of the large vessels and the left atrium enables to obtain blood samples and a continuous pressure recording, puncture of the gap between trachea and oesophagus allows the safe insufflation of air into the mediastinum which is a simple method of creating a diagnostic pneumo-mediastinum. Puncture aspiration and cytological examination is valuable, particularly in lesions of obscure origin affecting the peribronchium and lymph nodes. The simplicity of the procedure for the expert bronchoscopist should allow transtracheal and transbronchial punctures to be widely used as a diagnostic method.

• (XV, 6, 11)

EXCERPTA MEDICA Sec. 6 Vol. 11/8 Aug. 57

ŠIMEČEK C.

4818. ŠIMEČEK C. Tuberk. Odd. KÚNZ, Olomouc. Cytologická diagnostika zhoubných plicních nádorů. The importance of cytology in the diagnosis of pulmonary malignancy ROZHL. TUBERK. 1956, 16/7 (355-360) Tables 1 Illus. 14

An analysis of the results obtained in 1955 from 50 cases of malignant pulmonary disease, leads the author to the opinion that it is possible to judge with sufficient precision, from a majority of cytological findings, the likely histological structure of the tumour. Histological examination was performed later in 27 cases. In 24 of these, the histological structure was diagnosed correctly from the cytological picture (89%).

Blumberg - Jevičko (XV, 5, 6, 16)

E. CERPTA MEDICA Sec 16 Vol 7/5 Cancer May 59

1719. **Primitive pulmonary adenocarcinoma (pulmonary adenocarcinoma of alveolar type)** Adénocarcinome pulmonaire primitif (adénocarcinome pulmonaire de type alvéolaire). SIMELEK C., KREJCI J. and SIMELEKOVÁ B. *Poumon* 1958, 17/4 (351-368), Tables 1, Illus. 12

An analysis is made of 11 cases of primary pulmonary adenocarcinoma. Stress is laid on the prolonged clinical latency, on the diagnostic value of the radiological examinations and especially on that of the cytological studies. Attention is drawn to the close relationship between the development of this adenocarcinoma and the existence of previous, mainly cicatricial pulmonary alterations. From the point of view of the histogenesis, it is considered that there exist all forms of transition between alveolar and bronchiolar adenocarcinoma, and that, contrary to the classical opinions, the point of departure is unicentral. The mucus formation is variable, in accordance with the maturity of the tumour. References 91. Gernez-Rieux - Lille

~~ŠIMEČEK, C.~~ [Šimeček, C.]

Anomalous bronchus of the right lung. Probl.tub. no.4:95-96 '61.
(MIRA 14:12)

1. Iz tuberkuleznogo oddeleniya fakul'tetskoy bol'nitsy v
 2. Olomouci Czechoslovakia (zav. klinikoy Vl. Rzhiga).
- (BRONCHI—ABNORMALITIES AND DEFORMITIES)

SIMECEK, C.; BOREK, Z.

SURNAME, Given Names

Country: Czechoslovakia

Academic Degrees: Dr /presumably MD/

Affiliation: /not given/

Source: Prague, Vnitrni Lekarstvi, Vol VII, No 5, 1961. page 592.

Data: "Diagnostic Pneumomediastinum." (Diagnosticke penumopendiastinum).
Prague, State Publishing House of Medical Literature (Statni zdravotnicke nakladatelstvi), 1960. 164 pages, 106 illus.

GPO 981643

SIMECEK, Cyril

Simplified evaluation of spirographic records. Cas.lek.cesk 100
no.47:1490-1494 24 N '61.

1. Tbc oddeleni fakultni nemocnice v Olomouci, prednosta prim. MUDr.
Vl. Riha.

(SPIROMETRY)

SIMECEK, Cyril; WAGNER, Karel; HAMPEL, Frantisek

Bronchospirometric values of kyphoscoliosis. Acta chir. orthop.
trauma. cech. 29 no.3:256-259 Je '62.

1. Ortopedická klinika fakultní nemocnice v Olomouci, prednosta prof.
dr. A. Pavlik Tuberkulózní oddelení fakultní nemocnice v Olomouci,
prednosta dr. V. Riha.
(KYPHOSIS physiol) (SCOLIOSIS physiol)
(SPIROMETRY)

Wojcik, W., Witek, J. 1964, Cytol

Passive sensitization of the tuberculin type in pulmonary tuberculosis and sarcoidosis. Med. dosw. Mikrobiol. 16 no.1:55-60. 1964.

1. Zakładu Mikrobiologii Lekarskiej (Kierownik: doc. dr F. Morsalek) i z Kliniki Gruzliczej (Kierownik: doc. dr V. Bina) Wydziału Lekarskiego Uniwersytetu im. Palackiego w Głogowie.

SIMECEK, Cyril, dr.

Cytological picture of carcinomas and adenomas of the bronchi
in fluorescence microscopy. Vnitřní lek. 11 ro.6:566-569
Je*65.

1. Klinika tuberkulózy Palackého university v Olomouci
(prednosta: doc. Dr. V. Riha).

SIMECEK, C.

Indications for lymph node puncture of the bifurcation during
bronchoscopic examination. Cesk. otolaryng. 14 no.5:291-295
0 ' 65.

1. Tuberkulózní oddělení fakultní nemocnice v Olomouci (vedoucí MUDr. V. Riha).

1944, 1945, 1946, 1947, 1948, 1949, 1950, 1951, 1952, 1953, 1954, 1955, 1956, 1957, 1958, 1959, 1960, 1961, 1962, 1963, 1964, 1965, 1966, 1967, 1968, 1969, 1970, 1971, 1972, 1973, 1974, 1975, 1976, 1977, 1978, 1979, 1980, 1981, 1982, 1983, 1984, 1985, 1986, 1987, 1988, 1989, 1990, 1991, 1992, 1993, 1994, 1995, 1996, 1997, 1998, 1999, 2000, 2001, 2002, 2003, 2004, 2005, 2006, 2007, 2008, 2009, 2010, 2011, 2012, 2013, 2014, 2015, 2016, 2017, 2018, 2019, 2020, 2021, 2022, 2023, 2024, 2025, 2026, 2027, 2028, 2029, 2030, 2031, 2032, 2033, 2034, 2035, 2036, 2037, 2038, 2039, 2040, 2041, 2042, 2043, 2044, 2045, 2046, 2047, 2048, 2049, 2050, 2051, 2052, 2053, 2054, 2055, 2056, 2057, 2058, 2059, 2060, 2061, 2062, 2063, 2064, 2065, 2066, 2067, 2068, 2069, 2070, 2071, 2072, 2073, 2074, 2075, 2076, 2077, 2078, 2079, 2080, 2081, 2082, 2083, 2084, 2085, 2086, 2087, 2088, 2089, 2090, 2091, 2092, 2093, 2094, 2095, 2096, 2097, 2098, 2099, 2100, 2101, 2102, 2103, 2104, 2105, 2106, 2107, 2108, 2109, 2110, 2111, 2112, 2113, 2114, 2115, 2116, 2117, 2118, 2119, 2120, 2121, 2122, 2123, 2124, 2125, 2126, 2127, 2128, 2129, 2130, 2131, 2132, 2133, 2134, 2135, 2136, 2137, 2138, 2139, 2140, 2141, 2142, 2143, 2144, 2145, 2146, 2147, 2148, 2149, 2150, 2151, 2152, 2153, 2154, 2155, 2156, 2157, 2158, 2159, 2160, 2161, 2162, 2163, 2164, 2165, 2166, 2167, 2168, 2169, 2170, 2171, 2172, 2173, 2174, 2175, 2176, 2177, 2178, 2179, 2180, 2181, 2182, 2183, 2184, 2185, 2186, 2187, 2188, 2189, 2190, 2191, 2192, 2193, 2194, 2195, 2196, 2197, 2198, 2199, 2200, 2201, 2202, 2203, 2204, 2205, 2206, 2207, 2208, 2209, 2210, 2211, 2212, 2213, 2214, 2215, 2216, 2217, 2218, 2219, 2220, 2221, 2222, 2223, 2224, 2225, 2226, 2227, 2228, 2229, 2230, 2231, 2232, 2233, 2234, 2235, 2236, 2237, 2238, 2239, 2240, 2241, 2242, 2243, 2244, 2245, 2246, 2247, 2248, 2249, 2250, 2251, 2252, 2253, 2254, 2255, 2256, 2257, 2258, 2259, 2260, 2261, 2262, 2263, 2264, 2265, 2266, 2267, 2268, 2269, 2270, 2271, 2272, 2273, 2274, 2275, 2276, 2277, 2278, 2279, 2280, 2281, 2282, 2283, 2284, 2285, 2286, 2287, 2288, 2289, 2290, 2291, 2292, 2293, 2294, 2295, 2296, 2297, 2298, 2299, 2300, 2301, 2302, 2303, 2304, 2305, 2306, 2307, 2308, 2309, 2310, 2311, 2312, 2313, 2314, 2315, 2316, 2317, 2318, 2319, 2320, 2321, 2322, 2323, 2324, 2325, 2326, 2327, 2328, 2329, 2330, 2331, 2332, 2333, 2334, 2335, 2336, 2337, 2338, 2339, 2340, 2341, 2342, 2343, 2344, 2345, 2346, 2347, 2348, 2349, 2350, 2351, 2352, 2353, 2354, 2355, 2356, 2357, 2358, 2359, 2360, 2361, 2362, 2363, 2364, 2365, 2366, 2367, 2368, 2369, 2370, 2371, 2372, 2373, 2374, 2375, 2376, 2377, 2378, 2379, 2380, 2381, 2382, 2383, 2384, 2385, 2386, 2387, 2388, 2389, 2390, 2391, 2392, 2393, 2394, 2395, 2396, 2397, 2398, 2399, 2400, 2401, 2402, 2403, 2404, 2405, 2406, 2407, 2408, 2409, 2410, 2411, 2412, 2413, 2414, 2415, 2416, 2417, 2418, 2419, 2420, 2421, 2422, 2423, 2424, 2425, 2426, 2427, 2428, 2429, 2430, 2431, 2432, 2433, 2434, 2435, 2436, 2437, 2438, 2439, 2440, 2441, 2442, 2443, 2444, 2445, 2446, 2447, 2448, 2449, 2450, 2451, 2452, 2453, 2454, 2455, 2456, 2457, 2458, 2459, 2460, 2461, 2462, 2463, 2464, 2465, 2466, 2467, 2468, 2469, 2470, 2471, 2472, 2473, 2474, 2475, 2476, 2477, 2478, 2479, 2480, 2481, 2482, 2483, 2484, 2485, 2486, 2487, 2488, 2489, 2490, 2491, 2492, 2493, 2494, 2495, 2496, 2497, 2498, 2499, 2500, 2501, 2502, 2503, 2504, 2505, 2506, 2507, 2508, 2509, 2510, 2511, 2512, 2513, 2514, 2515, 2516, 2517, 2518, 2519, 2520, 2521, 2522, 2523, 2524, 2525, 2526, 2527, 2528, 2529, 2530, 2531, 2532, 2533, 2534, 2535, 2536, 2537, 2538, 2539, 2540, 2541, 2542, 2543, 2544, 2545, 2546, 2547, 2548, 2549, 2550, 2551, 2552, 2553, 2554, 2555, 2556, 2557, 2558, 2559, 2560, 2561, 2562, 2563, 2564, 2565, 2566, 2567, 2568, 2569, 2570, 2571, 2572, 2573, 2574, 2575, 2576, 2577, 2578, 2579, 2580, 2581, 2582, 2583, 2584, 2585, 2586, 2587, 2588, 2589, 2590, 2591, 2592, 2593, 2594, 2595, 2596, 2597, 2598, 2599, 2600, 2601, 2602, 2603, 2604, 2605, 2606, 2607, 2608, 2609, 2610, 2611, 2612, 2613, 2614, 2615, 2616, 2617, 2618, 2619, 2620, 2621, 2622, 2623, 2624, 2625, 26

100% of multidisciplinary training needs for small & large firms
 by 15 to 2,119 of 61

1, Major National newspaper: Goske Indojovine.

OVECKA, Ernest, inz.; SIMECEK, Ivo, inz.

Economic results and experiences in using the OMT Soviet
shield supports. Uhli 7 no.1:17-20 '65.

1. Jihomoravske lignitove doly, Hodonin.

SIMECEK, J.

"Centrifugal feed apparatus for steam boilers." p. 293. (Energetika. Vol. 3, no. 9, Sept. 1953. Praha.)

SO: Monthly List of East European Accessions, Vol. 3, no. 6, Library of Congress. June 1954. Uncl.

SIMECEK, J.
~~SHVACHKIN~~, Ye.

Cryostat for intermediate temperatures: Prib. i tekhn. eksp.
6 no.4:173-174 JI-Ag '61. (MIRA 14:9)

1. Institut fiziki Pol'skoy Akademii nauk.
(Cryostat)

ŠIMEČEK, II.

I Preparation of pure pentacerythritol. J. Šimeček. Chem. Listy 47, 1673-4 (1931).—Pentaerythritol was prepared by the hydrolysis of its dibenzal deriv. (II) prepd. by treating 136 g. I in 1800 ml. H₂O with 300 ml. 37% HCl and 212 g. Ball in 1800 ml. EtOH. The yield is 272 g. (87%) II, m. 164.5° (from Me₂CO). Hydrolysis of II with 1% HCl gave 90.3% pure I, m. 263-0°. Ball was recovered in 90% yield. M. Hudlický -

SEMECK, J.

"Determination of organic nitrates by titration with ferrous sulfate."

p. 285 (Chemický Průmysl) Vol. 7, no. 6, June 1957
Prague, Czechoslovakia

SO: Monthly Index of East European Acquisitions (EEAI) LC. Vol. 7, no. 4,
April 1958

CZECHOSLOVAKIA/Physical Chemistry. Kinetics. Combustion.
Explosions. Topochemistry. Catalysis.

Abs Jour: Ref Zhur-Khim., No 13, 1956, 42585.

Author : Siracek Jarcmir.

Inst : Decomposition of Nitrosamines and Nitramines in
Proteogenic Solvents. I. Decomposition of Cyclotri-

Title : Methylene-Trinitrosamine with Concentrated Sulfuric
Acid.

Orig Pub: Chem. listy, 1957, 51, No 7, 1323-1326.

Abstract: By action of mineral acids cyclomethylene-trinitro-
samine (I) is decomposed at ordinary temperature
to CH_3OH and N_2 . On dissolution of I in 96.7%
 H_2SO_4 there takes place at temperatures from -30
to -10°C an ionization of I to NO^+ and salt of

Card : 1/2

17

due to
NH₄⁺

CZECHOSLOVAKIA/Organic Chemistry. General and Theoretical
Problems of Organic Chemistry.

G

Abs Jour: Ref Zhur-Khim., No 23, 1958, 77480.

Author : Sinecek, Jaromir.

Inst :

Title : Decomposition of Nitrosamines and Nitramines in
Protogenic Solvents. II. Decomposition of Cyclo-
trimethylenetrinitramine with Concentrated Sulfuric
Acid.

Orig Pub: Chem. listy, 1957, 51, No 9, 1699-1703; Collect.
czechosl. Chem. Commun., 1958, 23, No 5, 962-967.

Abstract: It was confirmed that a part of nitro groups of
cyclo-trimethylenetrinitramine (I) splits off in
the form of nitron ions NO_2^+ under the action
of concentrated H_2SO_4 (see Vernazza E., Atti

Card : 1/3

CZECHOSLOVAKIA/Organic Chemistry. General and Theoretical
Problems of Organic Chemistry.

G

Abs Jour: Ref Zhur-Khin., No 23, 1958, 77480.

accad. sci. Torino, 1935, 70, 404). The degree of ionization in 90 to 100%-ual H_2SO_4 is proportional to the concentration of I. The ionization of nitro groups of I is a reversible reaction, which has been confirmed by the formation of I under the action of 97.5%-ual H_2SO_4 (4 ml) on 2.4 g of N,N'-dinitrocyclo-trimethylenetriamine nitrate (II) at 0 to 20° (yield 0.46 g), or under the action of the mixture of 97.5%-ual H_2SO_4 (7 ml) and 97.2%-ual HNO_3 (3 ml) on II at a temperature between -20 and +20° (yield 98%). II is formed in turn in the solution of I (2.2 g) in H_2SO_4 (10 ml) at 0 to 20°, which has been confirmed by the separation of II in the form of N,N'-dinitro-n"-nitrosocyclo-trimethylenetriamine, yield 76%, under

Card : 2/3

100

CZECHOSLOVAKIA/Organic Chemistry. General and Theoretical
Problems of Organic Chemistry.

G

Abs Jour: Ref Zhur-Khin., No 23, 1958, 77480.

the action of aqueous NaNO_3 solution (3 g) and Na_2SO_4 (5 g), melting point 165° (dissociates, from alcohol). The reaction is reversible only in the presence of unpaired hetero-cycles of cyclotrimethylenetriamine, which decomposes completely in H_2SO_4 in 2 hours' time. The decomposition kinetics was taken at 20, 30 and 40° . All the unbroken bonds $=\text{NNO}_2$ decompose with the formation of N_2O . The summary equation of the decomposition is the following: $\text{C}_3\text{H}_6\text{N}_3\text{O}_6 + 2\text{nH}^+ = 3\text{CH}_2\text{O} + (3 - \text{n})\text{N}_2\text{O} + \text{nNO}_2 + \text{nNH}_4^+$, where n depends on the concentration of H_2SO_4 and the relations of I to H_2SO_4 . See RZhKhin, 1958, 42585 for report I. - J. Kucera.

Card : 3/3

G-2

CZECHOSLOVAKIA / Organic Chemistry--Synthetic
Organic Chemistry

Abs Jour: Ref Zhur-Khimiya, No 8, 1959, 27498

Author : Simecek, J.

Inst : Not given

Title : The Decomposition of Nitrosoamines and Nitro-
mines in the Protogennic [Original?] Solvents.
III. Preparation of N,N'-dinitro-N''-Nitroso-
cyclotrimethylenetriamine

Orig Pub: Chem Listy, 51, No 12, 2367-2368 (1958) (in
Czech)

Abstract: Continuing work reported earlier (for Communi-
cation II see RZhKhim, 1958, 77480), the author
has synthesized N,N'-dinitro-N''-nitrosocyclo-
trimethylenetriamine (II) by the partial nitra-
tion of cyclotrimethylenetrinitrosoamine (I).

Card 1/2

CZECHOSLOVAKIA / Organic Chemistry--Synthetic
Organic Chemistry

G-2

Abs Jour: Ref Zhur-Khimiya, No 8, 1959, 27498

Abstract: 0.1 mol I is added at -25° to a mixture of 0.9 mol NH_4NO_3 and 1.8 mol 97.5% H_2SO_4 ; after 15 min (-15 [sic]) the mixture is allowed to warm up to 0° after which it is poured over ice (500 gms); II is obtained, yield 0.09-0.095 mol, mp 176° (decomp; from alc- CH_3NO_2). II is converted to cyclotrimethylenetrinitroamine. -- J. Kucera

Card 2/2

107

SIMECEK, Jaroslav; OPPL, Ladislav; KOCA, Ladislav

Contribution to the standardization of the method for assessing
dust. Prac. lek. 16 no.5:217-220 J1 '64.

1. Ustav hygieny prace a chorob z povolani v Praze (reditel prof.
dr. J. Teisinger, DrSc.).

L 12845-66

ACC NR: AP6005713

SOURCE CODE: CZ/0082/65/000/003/0224/0227

AUTHOR: Simek, J.

ORG: Neurological Department, Thomayer Hospital, Prague - Krc (Neurologické oddelení Thomayerovy nemocnice)

TITLE: Dysbasia cyphotica progressiva

SOURCE: Ceskoslovenska neurologie, no. 3, 1965, 224-227

TOPIC TAGS: clinical medicine, neurology, nervous system disease

ABSTRACT:

Progressive atypical extrapyramidal syndrome manifested by an increasing kyphosis of the trunk when walking in a 61 year old woman is described. Clinical picture was reminiscent of torsion spasm, or of dysbasia lordotica progressiva. The patient reacted well to Disipal, a drug acting on the extrapyramidal system. Degenerative lesion is considered a probable cause. Orig. art. has: 4 figures.

[JPRS]

SUB CODE: 06 / SUBM DATE: none / ORIG REF: 001 / OTH REF: 013

Cord

1/1 HW

REIDA, J.; PUGHIN, J.; DINEK, J.; SEMEK, C.; JAKLY, C.; BATEL, V.

The influence of the work day on the higher nervous activity of man in the framework of complex physiological analysis. (Summary of the final report). Activ. nerv. sup. (Praha) 7 no.1:65-66 '65.

L 13309-66

ACC NR: AP6006012

SOURCE CODE: C:/0053/65/011/001/0277/0277

AUTHOR: Hradsky, M.; Priborsky, V.; Herout, V.; Simek, J.; Kozak, J. 25

ORG: First Clinic of Internal Medicine, Faculty Hospital, Hradec Kralove (I. interni klinika fakultni nemocnice); Institute of Pathological Anatomy, Faculty Hospital, Hradec Kralove (Patologicko-anatomicky ustav fakultni nemocnice); Surgical Clinic, Faculty Hospital, Hradec Kralove (Chirurgicka klinika fakultni nemocnice)

TITLE: Effect of gastric cooling on changes in the gastric mucosa [This paper was presented during Biophysical Days, Brno, 12 Jun 64.]

SOURCE: Ceskoslovenska fysiologie, v. 14, no. 4, 1965, 277

TOPIC TAGS: dog, digestive system, animal physiology, cooling

ABSTRACT: Description of method, apparatus and recording procedure for study of the effects of gastric cooling in dogs. In the 3 dogs so far studied by gastric freezing for up to 60 minutes, comprehensively observed as to gastric mucosal condition before as well as one month after cooling, no adverse morphological changes were found by histological examination. [JPRS]

SUB CODE: 06 / SUBM DATE: none / OTH REF: 002

Card 1/19

SIMEK, J.; MELKA, J.; POSPISIL, M.; NERADILKOVA, M.

Effect of protracted glucose infusion on the development of early biochemical changes and initiation of regeneration in rat liver after partial hepatectomy. *Physiol. Bohemoslov.* 14 no.4:366-370 '65.

1. Department of Physiology and Department of Anatomy, Faculty of Medicine, Charles University, Hradec Kralove. Submitted May 25, 1964.

CZECHOSLOVAKIA

UDC 616.715(541.182.31541.18.05)-073.582.2

SIMECEK, Jaroslav; Institute of Work Hygiene and Occupational Diseases (Ustav Hygieny Prace a Chorob z Povolani), Prague, Director (Reditel) Prof Dr J. TEISINGER.

"Determination of the Particle-Size Distribution by Light Microscopy."

Prague, Pracovni Lekarstvi, Vol 18, No 9, Nov 66, pp 401 - 405

Abstract [Author's English summary modified]: The influence of microscope enlargement, method of measurement, and of the number of particles counted on the results in the determination of the size distribution is described. To obtain comparable and reproducible results, the particle size should be determined by a projecting microscope by the method of graticular circles, a minimum of 500 particles should be counted, the maximum enlargement should be 650 times for the eye lens/objective lens magnification ratio. Particle distribution should be interpreted by means of cumulative frequency curves. 3 Figures, 3 Tables, 2 Czech references. (Manuscript received 27 Sep 65).

1/1

TRACHEN, V.V., ~~inzh.~~; ~~SHIMCHENKO~~, Ya. [Sinecek, J.]

Evaluation of methods for dust control during the boring of
appetises in soft rock. Bor'ba s sil. 6:120-183 '64
(MIRA 18:2)

1. Institut gigiyeny truda i professional'nykh zabolevaniy
AN SSSR i Institut gigiyeny truda i professional'nykh za-
bolevaniy, Praga, Chexhoslovakiya.

SIMEK, Jaromir, inz.

A trimmer with a variable temperature coefficient of capacity.
Sdel tech 10 no.9:339-340 S '62.

SIMECEK, Jaroslav, Ing.

Determination of climatic conditions in mines. Pracovni lek.
7 no.3:168-171 May 55.

1. Ustav hygieny prace a chorob z povolani, Praha.
 (CLIMATE
 in mines, method of determ.)
 (MINING
 climatic cond., determ.)

SIMECK, Jaroslav, Ing.

Separate ventilation in mines. Pracovní lek. 7 no.1:34-37 Feb 55.

1. Ustav hygieny prace a chorob z povolani v Praze.

(VENTILATION

in mines, evaluation of methods)

(INDUSTRIAL HYGIENE

ventilation in mines, evaluation of methods)

(MINING

ventilation methods, evaluation)

Simecek, J.

50. COMPRESSED AIR EJECTORS IN MINES. Simecek, J. (Uhli (Coal, Prague), Jan. 1956, vol. 6, 15-17). The article describes the use of compressed air ejectors in the mines for independent ventilation of the stores; for mine air sampling when determining conditions of dustiness and for sucking off drill cuttings during dustless drilling operations. The author outlines the advantages and disadvantages of the apparatus used, suggests principles of designing air ejectors and gives instruction on how to make them more economical. The proper use of the ejector is greatly hampered by the lack of theoretical data on the subject; Professor G.N. Abramovic's so-called Theory of Heated Streams has led to some important conclusions which the author analyses as regards their application to air ejectors. The mathematical formulae quoted in this paper concerns i.e. the loss of kinetic energy according to the different speeds of the mixing (air) streams; the maximum theoretical efficiency of a simple ejector and the decisive effect of the turbulence of the air stream.

H.C.B.

111 28, 4.

The i -x diagram of moist air for varying pressure.

1. 219. (STROMIŘENÍ) (Praha, Czechoslovakia) Vol. 7, no. 12, Dec. 1957

20: Monthly Index of East European Accession (EEAI) 1C Vol. 7, No. 5, 1958

SHAN, J.

Determining dust concentration by membrane filters.

P. 343. (Unli.) (Praha, Czechoslovakia) Vol. 7, No. 10, Oct. 1957

SO: Monthly Index of East European Accession (MEAT) LC. Vol. 7, No. 5, 1958

SIMECEK, J.

Precipitation of dust from water and solutions. P. 22.

See Simecek, J.
ZDRAVOTNI TECHNIKA A VZDUCHOTECHNIKA. (Ceskoslovenska akademie ved. Ceskoslovenska
vedecka technicka spolecnost pro zdravotni techniku a vzduchotechniku) Praha,
Czechoslovakia. Vol. 1, no. 1, 1958.

Monthly list of East European Accessions (EEAI), LC, Vol. 8, no. 7, July 1959. Uncl.

SIMECEK, J.

"Silicosis in mining." P. 375.

RUDY. (Ministerstvo hutního průmyslu a rudných dolů). Praha,
Czechoslovakia, Vol. 6, No. 11, Nov. 1958.

Monthly list of East European Accessions (EEAI), LC, Vol. 8, No. 8,
August 1959.
Uncla.

SIMCEK J

Pub. No. : 100000, No. 20 1990, No. 100000

[illegible]

1. The first step is to identify the problem or question that needs to be answered. This involves understanding the context and the specific requirements of the task.

DATE: 7-10-68 : DEPT OF DEFENSE, 191st, 20, 10, 10-10

[illegible]

2002:

SIMECEK, J.

Measurement of dustiness of air in mines. p. 231

UHLI (Ministerstvo paliv) Praha, Czechoslovakia. Vol. 1, no. 7, July 1959

Monthly list of East European Accessions (EEAI), Vol. 9, no. 1, Jan. 1960

Uncl.

OPPL, L.; SIMEČEK, J.; KUBALEK, J.

Some most frequent errors in the measurement of dust. Pracovní.
lek. 12 no. 3: 120-125 Ap '60.
(DUST)

SIMEČEK, Jaroslav; OPPL, Ladislav

Quantitative determination of dust by means of a membrane filter.
Pracovní. lek. 12 no.3:139-144 Ap '60.

1. Ústav hygieny práce a chorob z povolání, reditel prof. dr.
J. Teisinger.
(DUST)

SIMECEK, Jaroslav

Determination of dust dispersion properties for hygienic purposes.
Pracovní lek. 13 no.3:139-146 Ap '61.

1. Ustav hygieny prace a chorob z povolani, Praha, reditel prof.
MUDr. J. Teisinger.

(DUST)

KUBIS, T.; STEPANEK, J.; SIMECEK, J.

Measurement of dust in harvesters of the combine and other types.
Pracovni lek. 13 no.7:329-332 S '61.

1. Okresna hygienicko-epidemiologicka stanica, Nitra, riad. MUDr.
J. Stepanek, Ustav hygieny prace a chorob z povolani, Praha, reditel
prof. dr. J. Teisinger.

(AGRICULTURE) (DUST)

SIMESEK, J.

Determining the hazard of a dusty environment. Pracovni lek. 14
no.4:194-199 My '62.

1. Ustav hygieny prace a chorob z povolani, Praha, reditel prof.
MUDr. J. Teisinger, DrSc.
(PNEUMOCONIOSES) (DUST)

SIMECEK, Jaroslav, inz.; KUBALEK, Jiri, dr.

Packings filled with water are efficient means against the dust in mines. Uhli 4 no.1:7-10 Ja '62.

1. Ustav hygieny prace a chorob z povolani, Praha (for Simecek).
2. Hornicky ustav, Ceskoslovenska akademie ved, Praha (for Kubalek).

CZECHOSLOVAKIA

J. LINDEK and J. KUBELK, Institute of Work Hygiene and Occupational Diseases (Ústav hygieny práce a chorob z povolání), Chief (reditel) Prof. Dr. J. TEISINGER, Prague.

"Comparison of Gravimetric Methods for Dust Concentration in Air."

Pracovní lékařství, Vol 14, No 10, Dec 1962; pp 464-468.

Abstract (English summary modified): Based on "large" number of tests in identical sites with membrane filters, Soxhlet extraction cartridges and Soxhlet dust particle meter, authors conclude that all 3 methods are equally reliable. In field, coal and stone dust were measured. Membrane filters and Soxhlet cartridges are officially adopted. Photograph of triple-recording device used in tests, 5 graphs, 5 Czech references.

171

1. J. J. J.

Recurrent disseminating myelitis or a new cerebellovestibular
syndrome in young girls. Czech neurol. 25 no. 6:314-40 1982.

In neurologické oddělení Thomáškova nemocnice v Praze, přednáška
dr. J. J. J.

(LAC TITULIS) (C. SCHLAR DISC.)
(V. STIBULAR APP. ATU)

SPICEK, J.

Organic nitrates. Part 1 : Production and properties of the pentaerythritenitrates. Coll Cz Chem 27 no.2:362-371 F '62.

1. MŠlterakademie "A. Zapotocky", Brno.

SIMECEK, Jaroslav, inz.

Protection against mine dust in the Soviet Union. Uhli 5 no.4:139-
140 Ap '63.

1. Ustav hygieny prace a chorob z povolani, Praha.

01-000000000000

ALBERT, Jaroslav, MSc, Candidate of Sciences; KOLAR, Václav, Dr. of Natural Science, Institute of Work Hygiene and Occupational Diseases, Prague; Mining Institute of the Czechoslovak Academy of Sciences, Prague (Work Hygiene, Prague Chapter, "Dusts"; "Dusts in the Air")

"Application to a Uniform Method for Determining Aerosol Concentrations"

Prague, Průmyslová a lékařská technika, Vol. 6, No. 1963, pp. 2-12

Abstract (author's English summary): The paper stresses the necessity of using standard methods for aerosol contamination determination. Individual methods for dust sampling and evaluation of samples are described as obtained from a research unit of the chief hygienist's committee for a uniform method for determining aerosol concentrations.

1. Ustav hygieny prace a chorob z povolani, Praha.

SIMECEK, J.

Assessment of dust in working areas in the USSR. Cesk. hyg. 8 no.5:308-312 Ja '63.

APPROVED FOR RELEASE: 08/23/2000

CIA-RDP86-00513R001550620012-9"

1. Ustav hygieny prace a chorob z povolani, Praha.
(DUST) (INDUSTRIAL MEDICINE)

SIMECEK, J.; TKACHOV, V.V. [Tkachov, V.V.]

Evaluation of various rock drilling methods from the viewpoint of hygiene. Rudy 11 no.7:213-216 J1 '63.

1. Ustav hygieny prace a chorob z povolani v Praze a Moskve.

HRICH-CHES, MUDR. (Kladno); KUBALEK, J., dr.; SIMECEK, J., inz.

Experience in salt stemming in blasting operations. Rudy
11 no.11: 369-372 N'63.

1. Hornický ústav, Československá akademie věd, Praha
(for Kubalek)
2. Ústav hygieny práce a chorob z
povolání, Praha (for Simecek).

SIMECEK, J.

Dust control in the U.S.S.R. Prac. lek. 15 no. 8:360-362 0'63.

*

SIMECEK, Jaroslav; VONDRACEK, Vladimir

Membrane filters manufactured by Synthesia. Munkavedelem 7 no.1/3:
42-44 '61.

1. Pragai Munkaegeszsegugyi es Foglalkozasi Betegsegeket Kutato
Intezet es a pragai Kozegeszsegugyi es Jarvanyugyi Allomas.

PACHNER, Petr, doc. M.Dr., Praha 10, Šrobárova 48; SIMEČEK, Jaroslav

Methods for the measurement of dust and evaluation of hazards
due to dust in Czechoslovakia. Prac. lek. 17 no.7:299-303 S '65.

1. Ústav hygieny práce a chorob z povolání v Praze (ředitel prof.
dr. J. Teisinger, DrSc.). Submitted May 10, 1965.

CZECHOSLOVAKIA

UDC 614.715(514.162.3)-673 5.81

SIMECEK, Jaroslav; TUMA, Jiri; Institute for Hygiene of Work and Occupational Diseases (Ustav Hygieny Prace a Chorob Z Povolani), Prague, Director (Reditel Prof Dr J. TEISINGER. Research Institute for Air Technology (Vyzkymny Ustav Vzduchotechniky), Prague.

"Determination of Dust Dispersion."

Prague, Pracovni Lekarstvi, Vol 18, No 3, Apr 66, pp 116 - 120

Abstract: The authors studied standard conditions for optical microscopy to find the accuracy and reproducibility of dust dispersion determination, and find a suitable gravimetric method for quantitative dust determination. The behavior of aerosols can be determined on the basis of the geometrical shape of the particles, from hydrodynamic properties of the particles, from their optical properties. The methods of expressing the dispersity of dust are described. The expression of the dispersity is discussed. The connections between the number of particles and their weight are discussed. 1 Figure, 1 Table, 6 Western, 4 Czech, 2 Russian references. (Manuscript received 27 Apr 65).

1/1

- 24 -

65978

24.7100

Z/037/60/000/02/011/018

E024/E310

AUTHOR: Šimeček, Tomislav

TITLE: Twinning in Crystals of CdTe¹

PERIODICAL: Československý časopis pro fysiku, 1960, Nr 2,
pp 180 - 181

ABSTRACT: Te (containing less than $10^{-3}\%$ Ca, Cu and Ge) and Cd (containing $5.8 \times 10^{-3}\%$ Pb, $10^{-3}\%$ Zn and traces of Cu and Ag), mixed in stoichiometric proportions, were heated to 500°C in an evacuated quartz ampoule. After the reaction had occurred, the CdTe was melted and mixed at 1060°C . Crystals were then grown in the same ampoule by gradual vertical cooling, the dimensions of the sample being determined by the ampoule, i.e. 11 mm dia and 50-70 mm length. A detailed description of the apparatus is given in Ref 1. The samples were cleaved at -180°C and at room temperature; good cleavage faces were produced in both cases. Judging by the number of faces of differing orientation, the sample contained between 5 and 10 monocrystals. A transverse cut was polished and then etched with Gillman's etchant.

Card1/3

65978

Z/037/60/000/02/011/018

E024/E320

Twinning in Crystals of CdTe

(320 g CrO_3 , 40 g Na_2SO_4 in 1 litre of water); the result is shown in Figure 1. The curved boundaries revealed by the etching were usually joined by definite cleavage faces. Those parts of the sample containing systems of straight boundaries showed common cleavage faces. The straight boundaries formed bands with periodic orientations (Figure 1). From the Debye-Scherrer powder photographs, it was found that the crystals were face-centred-cubic with a lattice constant of 6.41 Å. No other structure was found. Twinning along the (111) plane is well known in the f.c.c. structure (see Ref 2). Such twins have some common planes which may be common cleavage faces. For the case shown in Figure 2, this is obviously a (110) face. (101) and (011) can also be shown to be common planes. The angle of misorientation of these twins $70^\circ 31' 46''$. It is the angle between corresponding directions parallel to the (110) plane in both parts of the twin. A Laue back-reflection photograph has shown that such twins occur in the present case. The Laue diagrams of the two halves of

Card2/3

65978

Z/037/60/000/02/011/018

E024/E320

Twinning in Crystals of CdTe

the twin can be made to coincide by rotating them by $70^{\circ}30'$. The cleavage faces of the crystal form angles of 60° or 90° , which lends further support to the assumption that they are $\{110\}$ planes. With the aid of a probe it was found that no discontinuity in potential occurs on the twin boundaries when a current is passed through the crystal. This is in agreement with Ref 4. There are 2 figures and 4 references, of which 1 is Czech and 3 are English.

ASSOCIATION: Katedra fyziky pevných látek KU, Praha
(Chair of Solid-state Physics, Charles University, Prague)

SUBMITTED: August 25, 1959

14

Card 3/3

HUML, Karel; SIMECEK, Tomislav

Laboratory tube furnaces for temperatures up to 1,300°C.
Cs cas fys 14 no. 1:46-68 '64.

1. Katedra fyziky pevných látek, Matematicko-fyzikální fakulta Karlovy university, Praha (for Simecek).
2. UMCH, Československá akademie věd, Praha (for Huml).

SIMBICH, Tomislav (Praha)

Newest type of Czechoslovak lasers. Tech. praca 16 no. 1: 11-14.
Ja '64.

SIMECEK, Vaclav.

Clamping and feeding of bars in multispindle automatic lathes. Stroj vyr 11 no.11:574-575 F'63.

1. Zavody presneho strojirenstvi, n.p., Gottwaldov.

SIMECEK, Z.

Reducing overhead costs of tractor operation, an important factor in raising the standard of living. p. 457.

MECHANISACE ZEMEDELSTVI. Praha. Vol. 4, no. 24, Dec. 1954.

SOURCE: East European Accessions List (EEAL), LC, Vol. 5, no. 3, March 1956

SIMECEK, Z.

Simecek, Z. New wage and bonus system. p. 121. Employees of the Galanta Machine-Tractor Station accept commitments in order to surpass the Plan. p. 122. MECHANISACE ZEMEDELSTVI. Praha. Vol. 5, no. 7, Apr. 1955.

SO: Monthly List of the East European Accession, (EEAL), LC. Vol. 4, no. 10, Oct. 1955. Uncl.

SIMECEK, Z.

"How the Bohatice Machine-Tractor Station fights for reduction of costs in the operation of tractors."

MECHANISACE ZEMEDELSTVI, Praha, Czechoslovakia, Vol. 5, No. 18, September 1955.

Monthly List of East European Accessions (MEAI), LC, Vol. 8, No. 9, September 1959.

Unclassified.

STRECH, Z.

"The Sibice Machine-Tractor station pays on time the bonuses for fulfilling and exceeding the yields per hectare on the collective farms."

MECHANIZACE ZEMEDELSTVI, Praha, Czechoslovakia, Vol. 5, No. 23, December 1955.

Monthly List of East European Accessions (EAI), LC, Vol. 8, No. 9, September 1959.

Unclassified.

SIMEON, Z.

AGRICULTURE

Periodical RASVANSKOE ZEMELSTVO. Vol. 5, no. 24, Dec. 1955.

SIMEON, Z. Improved training of the workers will help in in the introduction of new methods. p. 464.

Monthly List of East European Accessions (EEAI) LC, Vol. 8, no. 3, March, 1959. Uncl.

SIMECEK, Z.

SIMECEK, Z. Some problems of the use of machinery and the reduction of overhead cost. p. 62.

Vol. 6, no. 4, Feb. 1956
MECHANISACE ZEMEDLSTVI
AGRICULTURE
Czechoslovakia

So: East European Accession, Vol. 6, No. 5, May 1957

11.11.1.

Mechanics and machines in mines. p. 183.

NY, Iran, Vol. 3, no. 6, June 1955.

SO: Monthly List of East European Accessions, (CIA), 10, Vol. 4, no. 10, Oct. 1955,
Uncl.

3607

the 1990s, the number of people in the world who are illiterate has increased from 1.2 billion to 1.5 billion. The number of illiterate people in the world is expected to reach 1.7 billion by the year 2015. The number of illiterate people in the world is expected to reach 1.7 billion by the year 2015. The number of illiterate people in the world is expected to reach 1.7 billion by the year 2015.

EXCERPTA MEDICA Sec. 6 Vol. 11/8 Aug. 57

SIMEČKOVÁ L.

4852. SIMEČKOVÁ L. and RUNŠTUKOVÁ J. Úst. Lék. Chem. Lék. Fak. MU, Brno; II. Vnit. Klin. Lék. Fak. MU, Brno. Použití ionexu při vyšetřování žaludečních šťáv v praxi. The use of an ion exchange resin in

tubeless gastric analysis VNITR LÉK. 1955. 1/12 (900-903)

Graphs 3 Tables 3

The method of Pelikán and Placer (Čas. Lék. Čes. 1953. 46) using a basic ion exchange resin was tested in 80 cases and compared with the usual method of gastric analysis by aspiration. Tubeless analysis was found satisfactory in normo- and hyperacidity, but it was not reliable in hypacidity. Bratislava - Prague

KREJCAR, Milos; SIMICKOVA, Ljuba; POKORNY, Jiri

Thiobarbiturate level in the blood stream during labor. Cas. lek. cesk.
98 no.27:848-851 3 July 59.

1. III. gynekologicko-porodnicke oddeleni v Brne, prednosta doc. dr.
Cernoch. Ustav pro lecarskou chemii lecarske fakulty v Brne, prednosta
prof. dr. O. Wagner. M.K., Brno, III. gyn. por. odd.

(LABOR, anesth. & analgesia

barbiturates, blood level during labor (Cz))

(BARBITURATES, in blood

during anesth. in labor (Cz))

URBASEK, Jan; SIMECKOVA, Libuse

Acute polychondritis. Cas.lek.cesk 100 no.21:639-643 26 My '61.

1. MUNZ-Ostrava I, interni oddeleni I, prednosta MUDr. J. Urbasek.

(CARTILAGE dis)

MIKULECKY, Z;NOVAKOVA, J;SIMRCKOVA, V.

Neutralization of skin sensitivity to the origin of occupational dermatoses. Lek. listy Brno 7 no.7:182-186 1 Apr. 1952,
(CJML 22:2)

1. Of the Dermatological Department (Head--Zdenek Mikulecky,
M. D.) of Kolin State District Hospital.

MIKULECKY, Z., MUDr; JENIKOVA-NOVAKOVA, J., MUDr; SIMSKOVA, V., MUDr;
OBERTHOR, J., MUDr

Occupational dermatitis in workers of fur industry. Prakt. lek.,
Praha 35 no.2:31-33 20 Jan 55

1. Z OUNZ v Koline, odd. kozni, prednosta primar MUDr Z.Mikulecky,
Z zavodniho zdrav. strediska v n.p. Kara, Stary Kolin
(DERMATITIS, CONTACT
occup. in fur indust.)
(OCCUPATIONAL DISEASES
dermatitis in fur indust.)

NISTOR, Dumitru, ing.; BORSI, Adalbert, ing.; BOLGAN, V., ing.;
MARGINEANU, E., ing. sef; POCOL, Alexandru; SOLOMON, Tr., ing. sef;
SIMEDREA, T., ing.; JENEI, D., ing. sef

Problems of increasing labor productivity in the mechanical
engineering industry. Probleme econ 16 no.12:149-151 D '63.

1. Director, Uzina Unio--Satu Mare (for Nistor). 2. Sef serv. org.
productiei, Uzina Unio--Satu Mare (for Borsi). 3. Director, Uzina
Infratirea-Oradea (for Bologan). 4. Uzina Infratirea-Oradea (for
Margineanu). 5. Director, Uzina Balanta-Sibiu (for Pocol).
6. Uzina Balanta-Sibiu (for Solomon). 7. Director, I.S.Tehnofrig-
Cluj (for Simedrea). 8. I.S.Tehnofrig-Cluj (for Jenei).

SIMEDREA, T., ing.; REGOZZI, V.; POP, Iosif; POP, Grigore, ing.

Labor productivity at the "Tehnofrig" and "Unirea" Enterprises,
Cluj. Probleme econ 17 no.10:147-148 O '64.

1. Director, I.S. "Tehnofrig", Cluj (for Simedrea).
2. Head of the Planning Service, I.S. "Tehnofrig" (for Regozi).
3. Director, "Unirea" Metallurgic Plant, Cluj (for Pop).
4. Head of the Production Organization Service, "Unirea" Metallurgic Plant, Cluj (for Pop).

12

6

Melting point of pure tellurium. A. RIMMER AND B. STEINLE *Collection Chem. Soc. Chem. Communications* 2, 313-14(1960) Com. Te was purified until spectroscopically pure. Heating curves showed no crit. point from room temp. to m. p. Te m. 452.0° in vacuo. This point is lowered in H₂ and CO₂ by 0.15-0.2°, resp. because of soln. of the gases
ANN NICHOLSON HIRD

RESEARCH METALLURGICAL LITERATURE CLASSIFICATION

CO

6

PROCESSES AND PROPERTIES AGE

The melting point of tellurium dioxide, A. SIEBE AND H. STUBBE, Collection
 (Incheson Chem. Comm. 2, 447-50(1930); cf. C. A. 24, 4224 -- TeO_2 , m. $732.6 \pm 0.1^\circ$.
 This value was detd. by a special extrapolation from heating curves. TeO_2 crystalline
 from the melt; it is uniaxial and pos.; d. = 6.02 V. P. HARRINGTON

450 110 DETAILING LITERATURE CLASSIFICATION

